



July 7, 2016

**BY ELECTRONIC FILING**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St, S.W.  
Washington, D.C. 20554

**Re: NOTICE OF EX PARTE**  
**GN Docket No. 14-177: *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services***

Dear Ms. Dortch,

On July 6, 2016, Competitive Carriers Association (“CCA”)<sup>1</sup> and several of its members representing nationwide, regional and rural carrier interests; Tom Peters of Hogan Lovells on behalf of Nextlink Wireless; and Eric Miller of Nextlink Wireless (collectively, “the Parties”), met with Commissioner Mignon Clyburn; Daudeline Meme, Legal Advisor to Commissioner Clyburn, Wireless, International and Public Safety; and Garrett Auzenne, Law Clerk with Commissioner Clyburn. A full list of attendees is included below. During the meeting, the Parties discussed the Federal Communications Commission’s (“FCC” or “Commission”) forthcoming Report & Order and Further Notice of Proposed Rulemaking in the above-referenced *Spectrum Frontiers* proceeding.<sup>2</sup> The Parties noted that they are generally pleased with the Chairman’s proposal to free up more spectrum for 5G deployments and to allow the technology to drive the FCC’s policy.<sup>3</sup> Nevertheless, the Parties discussed modifications outlined below that will foster rapid and more innovative 5G deployments in urban, suburban and rural areas alike.

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<sup>1</sup> CCA is the nation’s leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 customers to regional and national providers serving millions of customers. CCA also represents approximately 200 associate members including vendors and suppliers that provide products and services throughout the mobile communications supply chain. Additional spectrum opportunities are critical to developing and deploying new technologies for all CCA members within the wireless ecosystem.

<sup>2</sup> See FCC, “Fact Sheet: Spectrum Frontiers Proposal to Identify, Open Up Vast Amounts of New High-Band Spectrum for Next Generation (5G) Wireless Broadband” (rel. June 23, 2016), *available at* [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0623/DOC-339990A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0623/DOC-339990A1.pdf) (“*Spectrum Frontiers* Fact Sheet”).

<sup>3</sup> See Remarks of FCC Chairman Tom Wheeler, “The Future of Wireless: A Vision for U.S. Leadership in a 5G World,” National Press Club (June 20, 2016), *available at* [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0620/DOC-339920A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0620/DOC-339920A1.pdf).

## A. License Size

CCA members first praised the Commission for its adoption of smaller geographic license sizes for auction spectrum in this proceeding. Specifically, CCA strongly supports the use of smaller geographic license sizes, especially for newly auctioned spectrum, so rural and regional carriers have an opportunity to bid on their existing geographic market territory without being forced to compete and expend unnecessary and often limited resources for the more urban portions of their markets. Nevertheless, the Parties object to the Commission's proposal to change incumbent local multipoint distribution service ("LMDS") spectrum license sizes from Basic Trading Areas ("BTAs") to counties. In this instance, the Commission's proposed change to county license areas would harm incumbent licensees, especially small and rural carrier licensees.

Many incumbents facing increased buildout requirements would likely fail to comply and thus would lose their licenses. While the contemplated performance requirements themselves are not particularly onerous in isolation, the cost of buildout requirements for each "new" county-based license within the existing licensed BTA would greatly multiply the expense of holding LMDS licensees.<sup>4</sup> Specifically, rural carriers hold licenses in sparsely populated areas. For example, Central Texas Telephone Cooperative, Inc. ("CTTC") explained that it currently serves 19 counties within its two BTA licenses, and being forced to buildout networks in each of those 19 counties is untenable given technological and practical constraints. Some of CTTC's counties are completely rural and sparsely populated. In fact, CTTC's territory spans 3,200 square miles with less than 2 customers per square mile, and therefore it does not make sense to install points of presence ("POPs") or links per the proposed buildout requirements. Carriers should not be forced to deploy needless infrastructure to keep their licenses when they have already invested financial and human resources deploying and meeting the expected buildout requirements. Further, the Commission should not assume a relatively "empty" county justifies taking that license away from its incumbent holder; rural areas may not always remain sparsely populated, and agricultural or industrial use could invigorate spectrum utilization. Reducing the size of the license reduces its value, and carriers should not be deprived of a valuable asset for which they have already paid.

CTTC and C Spire also noted that the proposed new license sizes do not make sense from a technological perspective. Even if a rural carrier wanted to deploy a mobile network in a rural, flat county on LMDS spectrum, the necessary technology simply does not exist given LMDS spectrum's limited propagation capabilities. Nationwide carriers may use LMDS spectrum for terrestrial mobile uses, but rural and regional users likely will continue to use LMDS for backhaul and point-to-point services for some time.

The Parties support the Commission's goals of driving new technologies, but in the case of incumbent LMDS licenses, shrinking the license size is not the correct policy. For example, C Spire explained that it is exploring new equipment and plans to begin testing new technologies within the next few months in the mmW spectrum based on its current license parameters. Changing the license size now would put competitive carriers like C Spire in the position of having to decide between stranding their investment or keeping their license at an unreasonable cost.

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<sup>4</sup> See *Ex Parte* Letter from D. Cary Mitchell & John A. Prendergast, Counsel to the Blooston Rural Carriers, Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP, Counsel to the Blooston Rural Carriers, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 et al. (filed June 17, 2016).

Making matters worse, “splitting” the LMDS blocks would exhaust the resources of incumbent carriers. Breaking up the A1 band into separate licenses or separating the A1 and A2 bands will eliminate existing deployment scenarios. Multipoint downlink operations in the A1 band would likely cause interference where new licensees’ A1 downlinks are co-channel with legacy A1 uplinks, leading to an inefficient use of spectrum and the need to create a new generation of point-to-multipoint equipment. Splitting the A1 band into multiple parts would strand incumbent licensees’ current deployments and may require completely new deployment in (at least) one half of the band. Similarly, a failure to timely allocate the A2, A3 and B bands for next-generation mobile broadband services will, at best, result in operators needing to senselessly reinvest in new equipment at a later date that includes this 450 megahertz of spectrum—if the Commission’s delay does not result in these bands being left out of the 5G ecosystem entirely. Dramatically changing the character of existing LMDS licenses also would result in sunk costs for carriers who have already invested in network technology and may result in decreased coverage for rural areas. These carriers went to significant expense to construct their LMDS licenses, even when others were forced to return their licenses because of the lack of economically available equipment. This sort of change will deter 5G deployments in rural America.

Rather, the Parties encouraged the Commission to reward carriers for their investment. To that end, the Parties urged the Commission not to change the geographic license size for incumbent LMDS licensees. If, however, the FCC feels compelled to make a change, the Parties proposed a few potential alternatives, including the use of county-sized licenses for all LMDS licensees while allowing incumbent licensees to meet any new performance benchmarks in one county in its originally-licensed BTA for purposes of renewal, exempting incumbent LMDS licensees from changing to counties. Another alternative is to convert BTA licenses to Partial Economic Areas (“PEAs”) where a licensee holds a BTA license or licenses that cover an entire PEA, and to partition PEAs where a licensee holds a BTA license or licenses that cover only part of a PEA.<sup>5</sup> This proposal has the advantage of aligning the geographic licensing of 28 GHz with the licensing schemes in other 5G bands, including 37 GHz, 39 GHz and 600 MHz. As a result of significant confusion about the actual and potential technical uses for this spectrum, the Parties suggested that the Commission include the question about the appropriate geographic license size for LMDS in its Further Notice to develop a better record and for all interested parties to better understand how LMDS is being used today and will be used in a 5G world, especially in rural America.

Regardless, the Commission should not inflict the described harms on incumbent licensees without a plan to make those licensees whole. If it makes any changes to incumbent LMDS licenses, the FCC must provide additional relief to incumbent licensees including a ten-year glide path, beyond the currently proposed three to five years, for carriers to shift from BTA to county license sizes, and to deploy with sufficient time to modify current business plans. Certainty is needed to encourage investment in higher spectrum bands, particularly where a vast majority of the spectrum will require research and development of new technology to fully implement the bands.

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<sup>5</sup> See *Ex Parte* Letter from Michele Farquhar, Partner, Hogan Lovells, Counsel to Nextlink Wireless, LLC and XO Communications, LLC, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 *et al.* (filed June 30, 2016).

## B. Sharing the 37-37.6 Band

The Commission will severely devalue the 37-37.6 GHz band if it is used by “dynamic shared access between different commercial users, and commercial and federal users.”<sup>6</sup> The 37 GHz spectrum is the crown jewel of this proceeding because it represents greenfield opportunity. While all but a modest amount of the 28 and 39 GHz bands is already licensed, the 37 GHz band is not and is the only spectrum that could be fully auctioned for new services. This spectrum should be licensed for commercial use to achieve the greatest financial and technological value. At the very least, the Commission should not require two commercial parties to share, and should only subject licensees to sharing arrangements between commercial and federal users. CCA and T-Mobile, USA (“T-Mobile”) asked the Commission to take into account past successes with respect to mobile carriers coordinating with federal users in the AWS-1 spectrum and current successful efforts to coordinate use of AWS-3 spectrum. The Commission should not use an untested sharing approach in this band if the FCC wants to lead in 5G deployments.

Recognizing the benefits of a mix of spectrum technologies, the Parties support freeing up more spectrum for both licensed and unlicensed uses.<sup>7</sup> Nevertheless, the FCC is making available almost double the amount of unlicensed spectrum as licensed spectrum in these bands. When combined with existing high-band unlicensed spectrum, the Commission will double the current amount of high-band unlicensed spectrum to 14 GHz of spectrum. The FCC should reconsider its sharing proposal for this 600 megahertz of spectrum for licensed opportunities. In addition, T-Mobile noted that licensing a portion of the 64-71 GHz band will drive greater investment in technology development and deployment that will facilitate greater use of unlicensed portions of the band.

## C. Satellite Operations

The Parties also reiterated support for the Commission’s proposal to continue to license satellite operations on a secondary basis.<sup>8</sup> As noted, the amount of mmW licensed spectrum in this proceeding is limited. The FCC should not further constrain exclusive licensed access to this spectrum by complicating the band with satellite interference, particularly in major markets. While CCA and Nextlink Wireless support a shared terrestrial/satellite approach, the Commission should be cautious not to add uncertainty to terrestrial operations<sup>9</sup> by waiting to resolve this issue until a Further Notice of Proposed Rulemaking, despite arguments to the contrary. Such an approach would stymie investment in mmW spectrum and ultimately delay 5G deployment.

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<sup>6</sup> See *Spectrum Frontiers* Fact Sheet at 1.

<sup>7</sup> See Reply Comments of Competitive Carriers Association at 9 and 12, GN Docket No. 14-177, WT Docket No. 10-112 (filed Feb. 26, 2016).

<sup>8</sup> See *Spectrum Frontiers* Fact Sheet at 2.

<sup>9</sup> See *Ex Parte* Letter of Steve B. Sharkey, Vice President Government Affairs, Technology and Engineering Policy, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 at 2 (filed June 30, 2016).

## D. Operability

The Parties welcome mobile operability across the 28 GHz band and across the exclusively licensed portion of the 37 GHz band and 39 GHz band. Nevertheless, if the 37-37.6 MHz band is licensed-by-rule, it should not be included in an operability requirement for the 37.6-40 GHz licensed band. Including the licensed-by-rule band, where sharing requirements have not yet been established, would significantly delay development of standards and equipment and deployment in the traditionally licensed 37.6-40 GHz band. The Parties suggest the Commission take a more nuanced approach to operability with respect to fixed technologies and unlicensed spectrum. Specifically, T-Mobile and C Spire urged the Commission to consider how the operability rule might impact device development, considering some fixed technologies only function across a portion of the mmW bands described. Further, C Spire explained that fixed connections are often supported by non-standardized technology and therefore might not easily fit into the proposed operability rules. The Commission should fully explore the impact of an operability rule on both mobile and fixed technologies and with respect to unlicensed services in the 37 GHz band.

Finally, in response to questions asked by the Commission, CCA expressed concern over the proposed cybersecurity rules. The Commission describes a requirement to “file a statement before deployment that includes certain security-related information, such as a description of participation in standards body of security work, its intended approach to security, and the implications their security by design will have on other parts of the 5G ecosystem.”<sup>10</sup> Although the rule on its face seems to be presented as an information-gathering exercise, the Commission should describe the concerns animating this requirement, including any plans for treating required security filings confidentially and to ensure that no liability could attach to the statements in an enforcement action.

Likewise, in response to questions posed, CCA praised the Commission for recognizing the need for mmW spectrum aggregation limits. While the 1250 megahertz limit of all mmW spectrum is helpful, CCA reiterated its support for a two-tiered approach including an overall screen for licensed spectrum and a one-half screen for licensed spectrum in a particular band, like 28 GHz.<sup>11</sup>

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<sup>10</sup> See *Spectrum Frontiers* Fact Sheet at 2.

<sup>11</sup> See *Ex Parte* Letter from Rebecca Murphy Thompson, EVP & General Counsel, CCA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 et al. (filed June 15, 2016).

Full List of Attendees

Commissioner Mignon Clyburn

Daudeline Meme, Legal Advisor to Commissioner Clyburn, Wireless, International and Public Safety

Garrett Auzenne, Law Clerk with Commissioner Clyburn

John Hunter of T-Mobile, USA

Donald L. Herman, Jr. of Herman & Whiteaker on behalf of Adams Telecom. Inc., Central Texas Communications, Inc., E.N.M.R. Telephone Cooperative, Horry Telephone Cooperative, Inc., and Pine Belt Communications, Inc.

Ben Moncrief of C Spire (via telephone)

John Nettles of Pine Belt Communications, Inc. (via telephone)

Jamey Wigley of CTTC (via telephone)

Tom Peters of Hogan Lovells US, LLP on behalf of Nextlink Wireless

Eric Miller of Nextlink Wireless, LLC

Steven Berry of CCA (via telephone)

Rebecca Murphy Thompson of CCA (via telephone)

Tim Donovan of CCA

Courtney Neville of CCA

This *ex parte* notification is being filed electronically with your office pursuant to Section 1.1206 of the Commission's Rules. Please do not hesitate to contact me with any questions or concerns.

Sincerely,

*/s/ Rebecca Murphy Thompson*

Rebecca Murphy Thompson  
EVP & General Counsel  
Competitive Carriers Association

cc (via email): Commissioner Mignon Clyburn  
Daudeline Meme  
Garrett Auzenne